PATENT PD-YR1-52

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: SUSAN SEBATA ET AL.

Serial No.: 10/007,256 Filed: November 11, 2001

For: TWO-SIDED DEPLOYABLE THERMAL RADIATOR SYSTEM AND METHOD

Date: August 1, 2002

Group Art Unit: 3644

Examiner: Tien Q. Dinh

AMENDMENT Amel + A

Commissioner of Patents and Trademarks Washington, D. C. 20231

9molt # 1/2 6, Burns 08/21/02

Sir:

In response to the Office Action mailed June 12, 2002, please amend the above-identified patent application as follows.

IN THE CLAIMS

The following Claims have been amended to read as indicated.

1. A spacecraft radiator system for use on a spacecraft having a body and one or more solar arrays, the system comprising:

first and second opposite facing payload radiators;

one or more deployable radiators that radiate heat from both sides thereof; and heat pipes that thermally couple each payload radiator to the one or more deployable radiators disposed on a side of the spacecraft that is opposite to the respective payload radiator.

Al

5

5

5

2. A spacecraft comprising:

a body;

one or more solar arrays; and

a spacecraft radiator system comprising:

first and second opposite facing payload radiators;

one or more deployable radiators that radiate heat from both sides thereof; and heat pipes that thermally couple the respective payload radiators to the one or more deployable radiators disposed on a side of the spacecraft that is opposite to the respective payload radiator.

3. A spacecraft heat dissipation method comprising the steps of:

configuring a spacecraft to have a body, one or more solar arrays, first and second opposite facing fixed payload radiators, one or more deployable radiators that radiate heat from both sides thereof, and heat pipes that thermally couple the respective payload radiators to the one or more deployable radiators disposed on a side of the spacecraft that is opposite to the respective payload radiator;

launching the spacecraft into orbit; and